

NEW GENERA AND SPECIES OF AMERICAN BRACHYRHYNCHOUS CRABS.

By MARY J. RATHBUN,

Assistant Curator of Marine Invertebrates, United States National Museum.

The forms here described belong to the group formerly known as the Catometopa or Grapsoidea. The type-specimens of three of the species are in the Museum of Comparative Zoology and were kindly lent for description through Dr. Walter Faxon; paratypes of the same as well as types of the remaining species are in the United States National Museum.

FAMILY GONEPLACIDÆ.

Subfamily CARCINOPLACINÆ.

TRIZOCARCINUS,¹ new genus.

Type of the genus.—*Trizocarcinus dentatus* (Rathbun).

Carapace deep, subquadrilateral, broader than long, with little distinction of regions, convex fore and aft and from side to side. Fronto-orbital border about three-fourths of the greatest width of the carapace; antero-lateral borders arched, dentate. Front square-cut, straight, between one-third and one-fourth the width of the carapace, faintly notched in the middle, deeply separated from the supra-orbital angles. Upper margin of orbit with two distinct notches. Basal segment of antenna short, the flagellum standing loosely in the orbital hiatus. The antennules fold transversely. Buccal cavity increasing in width distally, maxillipeds widely gaping, their merus-joint with concave anterior margin, the antero-external lobe projecting forward not outward. Efferent branchial channels well defined. A stridulating ridge formed of parallel striæ runs obliquely backward from the antero-external angle of the buccal cavity; it is played upon by a short ridge on the merus of the chelipeds. Cheli-

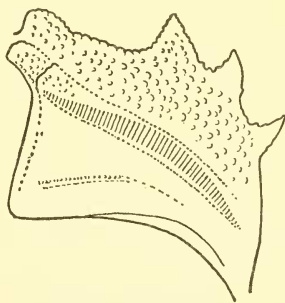


FIG. 1.—TRIZOCARCINUS DENTATUS, VENTRAL VIEW OF LEFT SIDE OF CARAPACE OF MALE TYPE, SHOWING STRIDULATING RIDGE, $\times 5$.

¹ Τριζω, to creak, to grate; Καρχαρος, crab.

ped equal, much more massive than the legs. In both sexes all seven abdominal segments are distinct and in the male the third segment covers the whole width of the sternum between the bases of the last pair of legs.

This genus is closely related to *Carcinoplax*¹ of the Indo-Pacific region, but differs chiefly in the form and disposition of the maxillipeds, the separation of the front from the orbit, and the presence of stridulating apparatus.

TRIZOCARCINUS DENTATUS (Rathbun).

Plate 1.

Carcinoplax dentatus RATHBUN, Proc. U. S. Nat. Mus., vol. 16, 1893, p. 243.

Type-locality.—Gulf of California, lat. 29° 40' N.; long. 112° 57' W., 76 fathoms, green mud, temperature 59° F., station 3016, U. S. Fisheries steamer *Albatross*.

Type.—Cat. No. 17462, U.S.N.M.

Distribution.—Gulf of California, 30 to 76 fathoms, green and gray mud, temperature 59° to 62° F.

The stridulating ridge on the pterygostomian region is crossed by about 70 fine striæ. A short, complementary ridge exists on the lower proximal margin of the inner surface of the arm and is crossed obliquely by 10 or 11 striæ.

Subfamily PRIONOPLACINÆ.

CYRTOPLAX,² new genus.

Type of the genus.—*Cyrtoplx spinidentata* (Benedict).

Carapace much broader than long, convex longitudinally and transversely. Regions well marked. Antero-lateral margins arcuate, dentate; postero-lateral margins converging. Fronto-orbital width three-fifths of width of carapace. Front advanced, lobes arcuate, separated only by a furrow from the orbital margin. Eyestalks tapering, corneæ small. Basal joint of antenna rather wide, inner angle just touching the front; flagellum standing in the orbital hiatus. Buccal cavity widening distally; maxillipeds gaping, merus broader than long. Chelipeds stout, unequal, wrists subtriangular in dorsal aspect, bispinose; palms high, fingers strongly deflexed. Legs long and slender; dactylus of last pair upcurved. The first and third abdominal segments of the male do not cover the sternum; the third, fourth, and fifth segments are fused.

This genus is much further removed than *Eucratopsis* from the Xanthid genus *Panopeus*. The carapace is much broader than in *Eucratopsis*, the eyestalks are slenderer, the eyes smaller, and the base of the male abdomen wider, but the first segment does not cover

¹ Milne Edwards, Ann. Sci. Nat., ser. 3, vol. 18, 1852, p. 164 (128).

² Κυρτός, convex; πλατός, anything flat and broad, carapace.

the sternum; the slender, deflexed fingers of the chelæ, and the strongly upcurved dactyli of the last pair of legs also separate the genus from *Eucratopsis*.

CYRTOPLAX SPINIDENTATA (Benedict).

Plate 2.

Eucratoplax spinidentata BENEDICT, Johns Hopkins Univ. Circ., vol. 11, 1892, p. 77.

Eucratopsis spinidentata RATHBUN, Bull. U. S. Fish Comm. for 1900, vol. 2, 1901, p. 11.

Type-locality.—Jamaica.

Type.—Cat. No. 17219, U.S.N.M.

Distribution.—Jamaica; Porto Rico; Trinidad.

CHASMOPHORA,¹ new genus.

Type of the genus.—*Chasmophora macrophthalma* (Rathbun).

Carapace very broad, subcylindrical, very convex longitudinally, much less so transversely; antero-lateral margin short, dentate. Fronto-orbital border about four-fifths the width of the carapace. Front separated from the orbital angle by a furrow. Eyes stout, filling the orbit; lower margin of orbit with a large outer sinus. Basal joint of antennæ not reaching the front, flagellum standing in the orbital hiatus. Buccal cavity widening anteriorly, entirely filled by the outer maxillipeds; distal angle of merus of maxillipeds prominent. Right cheliped of medium size; left not known. Legs slender. First segment of abdomen of female very broad, but not covering the whole width of the sternum; third segment narrower. It is probable that in the male these segments have a similar relation to the sternum.

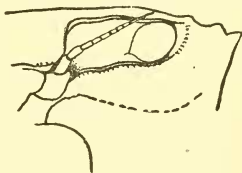


FIG. 2.—CHASMOPHORA MACROPHTHALMA, ANTERIOR VIEW OF ORBIT OF TYPE FEMALE, SHOWING HIATUS, IN WHICH LIES THE ANTENNAL FLAGELLUM, X ABOUT 20.

Near *Euryplax* Stimpson,² in which the antennal flagellum is widely removed from the orbit by a large process of the basal joint.

CHASMOPHORA MACROPHTHALMA (Rathbun).

Eucratopsis macrophthalma RATHBUN, Proc. U. S. Nat. Mus., vol. 21, 1898, p. 601, pl. 43, figs. 3 and 4.

Type-locality.—Panama Bay, lat. 7° 56' 00'' N.; long. 79° 41' 30'' W., 51.5 fathoms, green mud, station 2805, U. S. Fisheries steamer *Albatross*.

Type.—Cat. No. 21591, U.S.N.M.

¹ *Χάσμα*, an opening; *φωρά*, an orbit.

² Ann. Lyc. Nat. Hist. N. Y., vol. 7, 1859, p. 60.

Family GRAPSIDÆ.

Subfamily GRAPSINÆ.

PLANES MARINUS, new species.

Plate 3.

Type-locality.—At sea, west of Lower California, in lat. 23° 49' N.; long. 127° 50' W.; D. D. Rault, collector.

Type.—Male, Cat. No. 6065, Mus. Comp. Zoöl. One male, 1 female, paratypes, Cat. No. 22833, U.S.N.M.

Dimensions.—Male type, length 17.6 mm., width 19.3 mm., width of front, 10 mm.

Carapace convex antero-posteriorly and from side to side; surface covered with punctæ and fine reticulations; coarser striæ cross the anterior half transversely and nearly all the branchial region obliquely. Surface of front covered with short striæ and minute granulation; free edge arcuate and faintly bilobed, each lobe appearing in front view slightly bilobed; edge a raised finely granulated rim; post-frontal lobes low. Antero-lateral margins convex, with one blunt tooth behind the tooth at the angle of the orbit; postero-lateral margins nearly straight, convergent.

Chelipeds equal, massive; upper and lower margins of arm transversely striated, inner expansion irregularly denticulated; outer surface of wrist finely striated, tooth at inner angle blunt; surface of palms nearly smooth, shining, punctate, upper surface rounded, covered with finely granulated longitudinal lines which become oblique proximally. Fingers stout, prehensile edges narrowly gaping, dentate, a larger tooth at middle of fixed finger.

Legs short and broad; third foot one and one-half times as long as carapace; merus of third pair three-fifths as broad as long; dactyli short and stumpy, armed with coarse spines.

Many species of *Planes* have been described in the past, all of which are referable to variations of *P. minutus*;¹ but this form appears to be distinct. It has a great resemblance to *Pachygrapsus* also, and forms a link between the two genera.

From *Planes minutus* it differs in its broader carapace, somewhat depressed about the middle instead of uniformly convex; in the postero-lateral margins being nearly straight as in *Pachygrapsus*, not arcuate as in *Planes minutus*; in the more extensive striation of the dorsal surface; in the broader basal joint of the antenna; the broader merus-joint of the outer maxilliped, both its inner and outer lobes being more strongly developed; in the feebler dentation of the distal end of the inner expansion of the arm.

¹ *Cancer minutus* Linnæus, Syst. Nat., ed. 10, 1758, vol. 1, p. 625.

Our species resembles *Pachygrapsus crassipes* Randall¹ but the carapace is narrower and more convex, the post-frontal lobes lower, the lateral tooth not acute nor prominent, the postero-lateral margins less convergent, dorsal striæ finer and more broken, those of the branchial region less extensive, palm without a definite marginal line above, last four segments of the abdomen of the male more regularly triangular.

Subfamily VARUNINÆ.

CYRTOGRAPSUS ALTIMANUS, new species.

Plate 4.

Type-locality.—San Matias Bay, Patagonia; Hassler Expedition.

Additional locality.—Rio Grande do Sul, Brazil.

Type.—Male, Cat. No. 6126, M.C.Z. Two male paratypes in U. S. National Museum, Cat. No. 22835.

Dimensions.—Length of carapace of type male 16.8 mm., width of same, 18.4 mm.

This species while closely related to *C. angulatus* Dana,² which inhabits the same region, is much smoother and less ornate so that there is no likelihood of their being confused.

The carapace is not strongly areolated though the regions are well defined; the gastric region lacks the beaded transverse ridge characteristic of the older species. The surface is densely covered with fine depressed granules and somewhat less numerous punctæ; it appears almost smooth to the naked eye, while in *angulatus* the surface is obviously roughened with coarser granules. As to shape, the carapace has no sharp lateral angles, the antero-lateral margins are shorter than in *angulatus*, and the postero-lateral margins are longer and subparallel to each other. The antero-lateral margins have four teeth, including the orbital tooth, but they are small, especially the last two, and do not project beyond the marginal line; the intervals between the teeth diminish successively in length. There is no indication of a postero-lateral tooth.

The front is relatively wider than in *angulatus* and is feebly emarginate at the middle; the orbits are correspondingly smaller.

The outer maxillipeds have much the same shape in the two species, but in *altimanus* they are shorter and wider and the gape narrower.

The palms in the adult male are much higher in our species, especially at the distal end, and the movable finger is strongly deflexed; the immovable finger is nearly horizontal; there is a triangular space between the fingers for their proximal half only.

¹ Journ. Acad. Nat. Sci. Phila., vol. 8, 1839 (1840), p. 127.

² Proc. Acad. Nat. Sci. Phila., vol. 5, 1851, p. 250; Crust. U. S. Expl. Exped., vol. 1, 1852, p. 352; atlas, 1855, pl. 22, fig. 6a-c.

Legs narrower than in *angulatus*, second and third pairs subequal; propodal joint and proximal part of terminal joint of first three pairs fringed with hair on the posterior margin; last two joints and distal part of carpal joint of last pair fringed with hair on both margins.

The abdomen of the male is narrower and more oblong than in *angulatus*, and the appendages of the first segment slenderer.

PLATYCHIROGRAPSUS TYPICUS, new species.

Plate 5.

Aspidograpsus typicus KRØYER, MS., Copenhagen Museum.

Platychirograpsus spectabilis RATHBUN, Proc. U. S. Nat. Mus., vol. 22, 1900, p. 279 (part); not *P. spectabilis* de Man, 1896.¹

Type-locality.—Macuspana River, Montecristo, Tabasco, Mexico; 140 miles from the sea, altitude over 100 feet; collected by E. W.

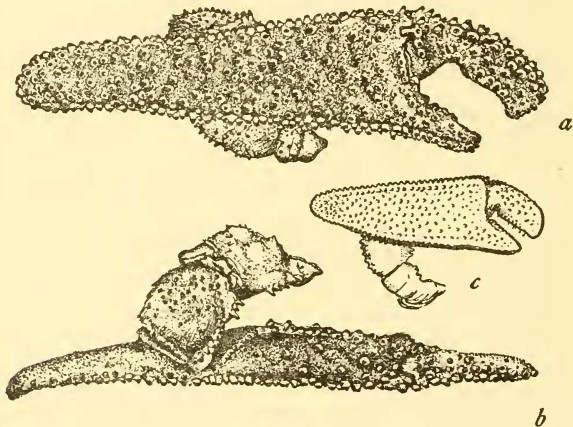


FIG. 3.—*PLATYCHIROGRAPSUS TYPICUS*. *a*. OUTER SIDE OF LARGE CHELA OF MALE IN HALIFAX MUSEUM, NAT. SIZE. *b*. UPPER VIEW OF SAME, NAT. SIZE. *c*. OUTER SIDE OF LARGE CHELA OF SMALL MALE FROM MEXICO, CAT. NO. 19863, $\times 1\frac{1}{2}$.

Nelson and E. A. Goldman, Biological Survey, U. S. Department of Agriculture; 1 male.

Additional localities.—Mexico; received from the exhibit by Mexico at the World's Columbian Exposition; 1 male. Gulf of Mexico; 1 male (Copenhagen Mus.). One large claw from an unknown locality (Halifax Mus.).

Type.—Cat. No. 23761, U.S.N.M.

Dimensions.—Male type, median length of carapace 42.5 mm., width 51 mm. Male from Mexican exhibit, length 27.2 mm., width

¹ Zool. Anz., 1896, No. 506, p. 292, text fig.; Jahrb. Hamburg. Wiss. Anst., vol. 12, 1896, p. 97, pl. 2, figs. 4, 4a, 4b, 4d; pl. 3, fig. 4c.

32.5 mm. As 4 specimens from different localities in Mexico agree in presenting certain characters which separate this form from the African *P. spectabilis* de Man, it seems best to consider it as a distinct species.

The fourth tooth of the lateral margin is farther back than in *spectabilis* and the postero-lateral margins behind this point are less convergent and more nearly parallel.

The margin of the front is more distinctly 4-lobed and the median sinus is larger and more U-shaped.

The dorsal surface of the carpus is not oblong but of nearly the same length and width.

The merus and carpus joints of the ambulatory legs are narrower and their sides more nearly parallel.

Subfamily SESARMINÆ.

SESARMA (SESARMA) VERLEYI, new species.

Plate 6.

Type-locality.—Jamaica: Mulgrave (a small village in the Cockpit country near Ipswich, St. Elizabeth); 1 female collected by Miss Verley and received through Mr. P. W. Jarvis.

Type.—Cat. No. 24940, U.S.N.M.

Dimensions.—Female type, length of carapace 20 mm., width 22.8 mm., fronto-orbital width 16.5 mm., width of front 9.1 mm.

Carapace strongly narrowed anteriorly, convex fore and aft, regions and suprafrontal lobes fairly well marked; of the latter the outer pair are narrower than the inner pair and their anterior margin more strongly marked. Anterior part of carapace granulated, postero-lateral area finely striated.

The lower margin of the front forms two prominent lobes in dorsal view. The sides are oblique and the angles rounded off.

Upper margin of orbit directed outward and forward, outer angle broad and obtuse, the margin between it and the lateral tooth convex. This tooth is subrectangular with thickened tip.

Chelipeds of female narrow. Outer surface of arm and wrist crossed by short lines of granules, upper and outer margins rough with short oblique and parallel lines of granules, inner margin irregularly spinulose. Palms longer than wide, sparingly covered with depressed granules, more numerous above and toward the carpus, where they are arranged somewhat in rows. Fingers as long as the middle length of the palm, prehensile edges irregularly toothed except the distal third, which has a straight horny edge, tips curved toward each other.

Legs unusually long; the third leg is three and one-fifth times as long as the carapace, its merus is four times as long as wide. The

legs (as well as the carapace) are nearly naked, only the margins of the last two joints (proximal end of the propodus excepted) bordered with short hairs with a few longer ones intermingled. The carpus has two prominent lines of granules on the upper surface, the posterior of which is continued somewhat obliquely on the next joint near its margin.

SESARMA (SESARMA) JARVISI, new species.

Plate 7.

Type-locality.—Jamaica: Mount Diablo, St. Ann's; 1 male.

Type.—Cat. No. 24941, U.S.N.M.

Dimensions.—Type male, length of carapace 10.7 mm., greatest width 12.7 mm., anterior width 10.7 mm., width of front 5.2 mm.

Carapace narrowed anteriorly, considerably flattened; regions and suprafrontal lobes well marked, outer pair of lobes very narrow. Surface irregularly punctate and sparingly covered with tubercles, each of which bears the stumps of a tuft of hair. The oblique ridges usually found on the branchial regions are few and are broken into short irregular lines. Lateral tooth blunt.

The front diminishes in width below, the lower margin is convex in front view and bilobed in dorsal view.

Chelipeds not much enlarged. The outer surface of arm and wrist are finely rugulose, margins of arm finely granulate or denticulate and not prominent. The chelæ are elongate (the specimen is perhaps not full grown); manus rough with a few scabrous granules outside, upper margin a sharp crenulated ridge. Fingers irregularly toothed within, nearly meeting; upper surface of dactylus finely spinulose, almost to the tip.

Legs very slender, surface rough, sparingly hairy, spine of merus acuminate. Third leg about two and one-half times as long as carapace, its merus a little over three times as long as wide.

SESARMA (HOLOMETOPUS) TAMPICENSE, new species.

Plate 8.

Type-locality.—Tampico, Mexico; Dr. Edward Palmer; June 1, 1910. "Lives in the soft mud of the river banks"; 4 males.

Type.—Cat. No. 45794, U.S.N.M.

Dimensions.—Type male, length 16.1 mm., greatest width (at base of second leg) 17.3 mm., width between outer angles of orbit 17.2 mm., width of front 9.4 mm., height of front measured from middle lobes 2 mm., extreme length of propodus of cheliped 13.7 mm., height of palm 8.4 mm., length of propodal finger along prehensile edge 6 mm., length of dactylus along upper margin 8.5 mm., length of propodus of third leg 11.8 mm., greatest width of same 4.2 mm.

Carapace perceptibly wider than long, of nearly even width throughout, though widening slightly behind. Surface coarsely punctate at the middle, finely punctate on the branchial and intestinal regions, the punctæ more or less connected by fine grooves; surface of frontal region and antero-lateral angles finely granulate; postero-lateral grooves fine.

Supra-frontal lobes deeply separated, the median groove larger than the lateral grooves; middle pair of lobes transversely arcuate; outer pair narrower, oblique, trending forward toward the orbit. Front relatively broad and low, about 5 times as wide as high, sides vertical, lower margin arcuate in front view, sinuous in dorsal view, surface concave in both directions. Upper margin of orbit nearly straight, up to the short, acute tooth at the outer angle of the orbit.

Merus of cheliped covered with granulated rugæ on its outer face; lower outer margin with a well-marked subdistal tooth; tooth on upper margin nearly obsolete; inner margin denticulate, distally expanded and bearing a large tooth. Upper surface of carpus similar to outer surface of merus. Palm massive in the full-grown male, as high as its horizontal length, lower margin arcuate, upper margin marked by interrupted lines of granules; outer surface covered with fine, depressed granules, inner surface with much larger granules on the more elevated portion. Fingers rather long and slender, for the genus, gaping in the male except at the tip; prehensile edges dentate, with 2 or 3 teeth enlarged on each finger.

Legs of moderate length, the third pair about twice as long as the carapace; merus joints about two and three-fourths times as long as wide, converging slightly from the middle to the distal end.

Side margins of male abdomen sinuous. Appendages of first segment widened behind the tips, which are transverse.

Allied to *S. cinereum* (Bosc)¹ and *S. miersii* Rathbun.² It differs from both in the front having parallel sides instead of widening below, in the fingers gaping, in the male appendages transversely, instead of obliquely, cut at the tip. From *S. cinereum* it differs also in its narrower carapace, without scattered tufts of hair, longer fingers, and narrower male abdomen; from *S. miersii* in the relatively smooth palms, those of *miersii* being coarsely granulate.

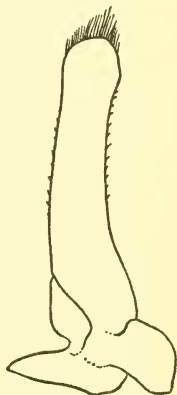


FIG. 4.—*SESARMA* (*HOLOMETOPUS*) *TAMPICENSE*, VENTRAL VIEW OF LEFT APPENDAGE OF FIRST ABDOMINAL SEGMENT OF MALE, $\times 10$.

¹ *Grapsus cinereus* Bosc, Hist. Nat. Crust., vol. 1, 1802 (an X), p. 204, pl. 5, fig. 1.

² *Sesarma* (*Holometopus*) *miersii* Rathbun, Proc. Biol. Soc. Washington, vol. 11, 1897, p. 91.

Family OCYPODIDÆ.

Subfamily OCYPODINÆ.

UCA MONLIFERA,¹ new species.

Plate 9.

Eurychelus monilifer L. AGASSIZ, MS. label.

Type-locality.—Guaymas, Mexico; Capt. C. P. Stone, U. S. N., collector, 1859.

Type.—Male, Cat. No. 1578, M. C. Z.; 1 male paratype in U. S. National Museum, Cat. No. 22180.

Dimensions.—Length of carapace of type male 28.7 mm., width at antero-lateral angles 45.4 mm.

This is the Pacific representative of the well-known fiddler crab with narrow front and broad fingers, *Uca maracoani* (Latreille)², which is distributed on the Atlantic coast of South America from Cayenne to Rio de Janeiro.

U. monilifera is considerably larger than *maracoani*, as the carapace of a large specimen of the latter measures 22×34 mm. There is no raised or granulated line bounding the dorsal plane on either side, but the dorsal rounds smoothly into the lateral surface. As in *maracoani* the anterior margin of the carapace or superior margin of the orbit is transversely sinuous, forming a triangular tooth at the antero-lateral angles, and the front between the eyes is extremely narrow and spatuliform, its median furrow linear and not reaching the broadest part of the spatula.

The lower margin of the orbit is deeply crenated or turreted throughout.

The large cheliped of the male is much smoother than in the Atlantic form. The inner border of the arm has a large laminar expansion directed upward, edge arcuate, denticulate. The wrist is more elongate than in *maracoani*. The tubercles of the palm are few and indistinct. Fingers quite smooth except at the margins and at the base of the dactylus, where there are a few depressed tubercles. On the immovable finger there is, as in *maracoani*, a raised line just above the lower margin and continued backward on the palm; there is, however, no broad lobe or tooth on the proximal half of the prehensile edge. The movable finger has a different shape from that of the allied species; while the upper margin is a regular and moderate curve, the prehensile edge is concave for its basal three-eighths, then straight to near the tip, forming a small tooth at the meeting of the two lines; this brings the widest part of the finger just proximal to its middle. In *maracoani*, the widest part of the finger is near its distal

¹ I have adopted the specific name used by Prof. Louis Agassiz on a Museum label, but hitherto unpublished.

² *Ocypode maracoani* Latreille, Hist. Nat. Crust., vol. 6, 1803 (an XI), p. 46.

Gelasimus Maracoani Milne Edwards, Ann. Sci. Nat., ser. 3, vol. 18, 1852, p. 144 [108], pl. 3, figs. 1-1b.

third, and the whole of the distal half is much wider than in the new species. The spiniform finger tips are not strongly bent in *monilifera*.

The ambulatory legs are almost bare except the dactyli.

The chief difference in the form of the male abdomen of the two species lies in the penultimate segment: in *monilifera* it is less than twice as wide as it is long; in *maracoani* just twice as wide as long.

UCA MUSICA, new species.

Plate 10.

Gelasimus gibbosus STREETS (not Smith), Bull. U. S. Nat. Mus., vol. 7, 1877, p. 113.

Uca stenodactyla ORTMANN, Zool. Jahrb., Syst., vol. 10, 1897, p. 356 (part).

Uca stenodactylus RATHBUN, Proc. U. S. Nat. Mus., vol. 21, 1898, p. 603 (not synonymy).

Type-locality.—Pichilique Bay, Gulf of California, U. S. Fisheries steamer *Albatross*, 1888; 1 male.

Type.—Cat. No. 22081, U.S.N.M.

Distribution.—From San Diego, California, to Mazatlan, Mexico; occasionally farther north. San Diego (Ortmann); San Bartolomé

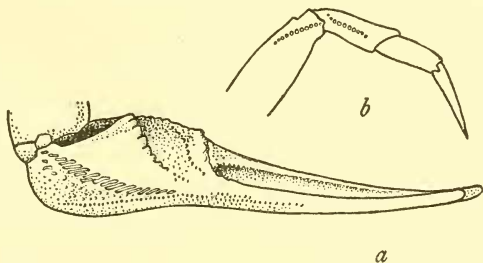


FIG. 5.—UCA MUSICA. *a*. LOWER VIEW OF LARGE (LEFT) CHELA OF MALE TYPE, SHOWING STRIDULATING RIDGE, $\times 3\frac{1}{2}$. *b*. ANTERIOR (LOWER) VIEW OF PORTION OF FIRST LEFT AMBULATORY LEG OF MALE TYPE, SHOWING GRANULES WHICH PLAY AGAINST STRIDULATING RIDGE, $\times 3\frac{1}{2}$.

Bay, Lower California (Lockington); La Paz (Streets), specimens in United States National Museum; Guaymas Bay, William Palmer, collector; Mazatlan, C. H. Gilbert, collector; Seattle, Washington, D'Arcy W. Thompson, collector, photographs of large chela in United States National Museum; Vancouver Island, B. C., photographs received from C. F. Newcombe.

Dimensions.—Type male; length of carapace 8 mm.; width 12.9 mm.

Very like *Uca stenodactylus* (Milne Edwards and Lucas),¹ which ranges from Salvador, Central America, to Valparaiso. Differs as

¹ *Gelasimus stenodactylus* Milne Edwards and Lucas, Voy. dans l'Amér. Mérid. par d'Orbigny, vol. 6, 1844, Crust., p. 26; vol. 9 (atlas), 1847, pl. 11, fig. 2.

follows: The upper margin of the orbit is much less oblique. The lateral angle of the carapace, marking its greatest width, is farther back. The granules of the palm are of more uniform size. The palm is scarcely depressed near the immovable finger. The dactylus is more strongly arched. The transverse ridge across the inner surface of the palm is very prominent, is bent at an obtuse and rounded angle and is armed for nearly its whole length with a row of large tubercles. Near the proximal lower corner of the inner surface there is a longitudinally oblique stridulating ridge extending from the articulation with the carpus to the lower marginal line of the palm almost below the angle of the transverse ridge. The stridulating ridge is made up of closely placed parallel lines oblique to the axis of the ridge and subparallel to the lower margin of the palm. When the cheliped is flexed the ridge plays against a line of granules on the lower or anterior surface of the first ambulatory leg; this line extends nearly the whole length of the carpal segment and part way along the merus. The third to sixth abdominal segments of the male are more completely fused.

EXPLANATION OF PLATES.

PLATE 1.

Trizocarcinus dentatus, male type, $\times 2$

- FIG. 1. Antero-ventral view.
 2. Dorsal view.
 3. Posterior view.

PLATE 2.

Cyrtoplax spinidentata, male type, $\times 1\frac{1}{2}$.

- FIG. 1. Antero-ventral view.
 2. Dorsal view.
 3. Posterior view.

PLATE 3.

Planes marinus, male type, $\times 2$.

- FIG. 1. Antero-ventral view.
 2. Dorsal view.
 3. Ventral view.

PLATE 4.

Cyrtograpsus altimanus, $\times 2$.

- FIG. 1. Ventral view of male type.
 2. Dorsal view of male type.
 3. Antero-ventral view of male paratype.

PLATE 5.

Platychirograpsus typicus, dorsal view of male type, nat. size.

PLATE 6.

Sesarma (Sesarma) verleyi, female type, $\times 1\frac{1}{2}$.

- FIG. 1. Ventral view.
2. Dorsal view.
3. Anterior view.

PLATE 7.

Sesarma (Sesarma) jarvisi, male type, $\times 2$

- FIG. 1. Anterior view.
2. Dorsal view.
3. Ventral view.

PLATE 8.

Sesarma (Holometopus) tampicense, male type, $\times 2$.

- FIG. 1. Anterior view.
2. Dorsal view.
3. Ventral view.

PLATE 9.

Uca monilifera, male type, nat. size.

- FIG. 1. Anterior view.
2. Dorsal view.
3. Ventral view.

PLATE 10.

Uca musica, male type, $\times 2$.

- FIG. 1. Antero-ventral view, showing outside of large chela.
2. Antero-dorsal view, showing top of large chela.
3. Dorsal view.
4. Postero-ventral view, showing under side of large chela with stridulating ridge.